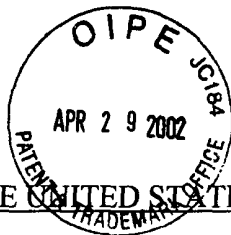


S/N 09/745687



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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#10 / IPS
5.14.02

Applicant:	GILL et al.	Examiner:	Unknown
Serial No.:	09/745687	Group Art Unit:	1655
Filed:	December 22, 2000	Docket No.:	7500.355US01
Title:	IMPROVEMENTS IN AND RELATING TO ANALYSIS OF DNA SAMPLES		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence and the paper(s), as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on April 17, 2002.

By:

Nicole Landree

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(c))

Commissioner for Patents
Washington, D.C. 20231

05/01/2002 TGEDAMU1 00000079 09745687

01 FC:126

180.00 DP

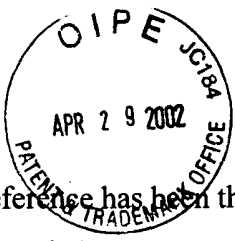
Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner. At least some of the references were recently cited in an International Search Report mailed February 8, 2002.

This statement should be considered because it is submitted after the mailing date of a first Office Action on-the-merits or a first Office Action after filing a Request for Continued Examination under 37 C.F.R. § 1.114 or a CPA under 37 C.F.R. § 1.53(d), but before the mailing date of: i) a final action under 37 C.F.R. § 1.113; ii) a Notice of Allowance under 37 C.F.R. § 1.311; or iii) an action that otherwise closes prosecution on the application. Enclosed is a check in the amount of \$180.00 under 37 C.F.R. § 1.17(p) for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. § 1.98(a)(2), a copy of each document or other information listed on the enclosed Form 1449 is provided. Enclosed for the Examiner's information is a copy of the International Search Report.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a



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reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

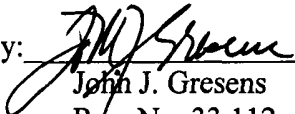
Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Please charge any additional fees or credit any overpayment to Deposit Account No. 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903
(612)332.5300

Dated: April 17, 2002

By: 
John J. Gresens
Reg. No. 33,112

JJG/nel



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: GILL et al. Examiner: Unknown
Serial No.: 09/745687 Group Art Unit: 1655
Filed: December 22, 2000 Docket: 7500.355US01
Title: IMPROVEMENTS IN AND RELATING TO ANALYSIS OF DNA SAMPLES

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CERTIFICATE UNDER 37 CFR 1.8:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on April 17, 2002.

By: Nicole Landree
Name: Nicole Landree

Commissioner for Patents
Washington, D.C. 20231

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Sir:

We are transmitting herewith the attached:

- ☒ Transmittal Sheet in duplicate containing Certificate of Mailing
- ☒ Supplemental Information Disclosure Statement, Form 1449, 6 Reference(s), Copy of International Search Report
- ☒ Check(s) in the amount of \$180.00 for Supplemental Information Disclosure Statement
- ☒ Return postcard

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT & GOULD P.C.
P.O. Box 2903, Minneapolis, MN 55402-0903
612.332.5300

By: John J. Gresens
Name: John J. Gresens
Reg. No.: 33/112
JJG/nel



23552

PATENT TRADEMARK OFFICE

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference ANP/P17727W0	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 01/ 01657	International filing date (day/month/year) 12/04/2001	(Earliest) Priority Date (day/month/year) 15/04/2000
Applicant THE SECRETARY OF STATE FOR THE HOME DEPARTMENT		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 01/01657

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68 G06F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GILL P ET AL: "Interpretation of simple mixtures of when artefacts such as stutters are present: With special reference to multiplex STRs used by the Forensic Science Service." FORENSIC SCIENCE INTERNATIONAL, vol. 95, no. 3, 12 August 1998 (1998-08-12), pages 213-224, XP001027029 ISSN: 0379-0738	23-31, 34, 35, 44-46
Y	page 214, paragraph 2 -page 219 --- -/--	1-22, 32, 33, 36-43

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

29 January 2002

Date of mailing of the international search report

08/02/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bradbrook, D

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 01/01657

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CLAYTON T M ET AL: "ANALYSIS AND INTERPRETATION OF MIXED FORENSIC STAINS USING DNA STR PROFILING" FORENSIC SCIENCE INTERNATIONAL, ELSEVIER SCIENTIFIC PUBLISHERS IRELAND LTD, IE, vol. 91, no. 1, 9 January 1998 (1998-01-09), pages 55-70, XP001013202 ISSN: 0379-0738 cited in the application page 57, paragraph 1 -page 64, paragraph 2 abstract ---	1-46
Y	GILL P ET AL: "Development of guidelines to designate alleles using an STR multiplex system." FORENSIC SCIENCE INTERNATIONAL, vol. 89, no. 3, 1997, pages 185-197, XP001027298 ISSN: 0379-0738 page 186, paragraph 2 - paragraph 4; tables 5,6 ---	1-46
Y	WEIR B S ET AL: "Interpreting DNA mixtures." JOURNAL OF FORENSIC SCIENCES, vol. 42, no. 2, March 1997 (1997-03), pages 213-222, XP001012657 ISSN: 0022-1198 page 213, column 2, paragraph 5 -page 214, column 2, paragraph 2 ---	1-46
Y	GILL P ET AL: "INTERPRETING SIMPLE STR MIXTURES USING ALLELE PEAK AREAS" FORENSIC SCIENCE INTERNATIONAL, ELSEVIER SCIENTIFIC PUBLISHERS IRELAND LTD, IE, vol. 91, no. 1, 1998, pages 41-53, XP001012655 ISSN: 0379-0738 page 49, paragraph 3 -page 53, paragraph 2; table 1 ---	1-46
A	GILL PETER ET AL: "Automated short tandem repeat (STR) analysis in forensic casework: A strategy for the future." ELECTROPHORESIS, vol. 16, no. 9, 1995, pages 1543-1552, XP001027034 ISSN: 0173-0835 abstract --- -/--	1-46

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 01/01657

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	<p>GILL PETER ET AL: "An investigation of the rigor of interpretation rules for STRs derived from less than 100 pg of DNA." FORENSIC SCIENCE INTERNATIONAL, vol. 112, no. 1, 24 July 2000 (2000-07-24), pages 17-40, XP001027292 ISSN: 0379-0738 the whole document -----</p>	1-46

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 47-60

Claims 47-60 are defined in such vague terms that the skilled reader is unable to determine exactly the meaning and nature of the given features, which thereby appear to lack a technical nature. In consequence, it is unclear how the claimed method should be carried out, and what scope the claimed method should have.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 01/01657

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 47-60
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Date Mailed: April 17, 2002

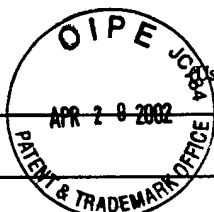
Sheet 1 of 1

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FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION <small>(Use several sheets if necessary)</small>	Docket Number: 7500.355US01	Application Number: 09/745687
	Applicant: GILL et al.	
	Filing Date: December 22, 2000	Group Art Unit: 1655



U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS							
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
1	Gill, P., et al., "Interpretation of simple mixtures of when artifacts such as stutters are present: With special reference to multiplex STRs used by the Forensic Science Service." FORENSIC SCIENCE INTERNATIONAL, vol. 95, no. 3, 12 August 1998, PAGES 213-224, XP001027029	✓
2	Clayton, T.M., et al., "Analysis and Interpretation of Mixed Forensic Stains Using DNA STR Profiling" FORENSIC SCIENCE INTERNATIONAL, ELSEVIER SCIENTIFIC PUBLISHERS IRELAND LTD, IE, vol. 91, no. 1, 9 January 1998, pages 55-70, EP001013202	✓
3	Gill, P., et al., "Development of guidelines to designate alleles using an STR multiplex system", FORENSIC SCIENCE INTERNATIONAL, vol. 89, no. 3, 1997, pages 185-187	✓
4	Weir, B.S., et al., "Interpreting DNA mixtures" JOURNAL OF FORENSIC SCIENCES, vol. 42, no. 2, March 1997, pages 213-222, XP001012657	✓
5	Gill, P., et al., "Interpreting Simple STR Mixtures Using Allele Peak Areas" FORENSIC SCIENCE INTERNATIONAL, ELSEVIER SCIENTIFIC PUBLISHERS IRELAND LTD, IE, vol. 91, no. 1, 1998, pages 41-53, XP001012655	✓
6	Gill, Peter, et al., "Automated short tandem repeat (STR) analysis in forensic casework: A strategy for the future", ELECTROPHORESIS, vol. 16, no. 9, 1995, pages 1543-1552, XP001027034	✓



EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.	